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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,868	08/16/2005	Naofumi Ezawa	Q83993	9791
23373 7590 04/08/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER KNABLE, GEOFFREY L				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
04/08/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PPROCESSING@SUGHRUE.COM  
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# Office Action Summary

## Application No.

10/509,868

## Applicant(s)

EZAWA, NAOFUMI

## Examiner

Geoffrey L. Knable

## Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/22)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-297209 to Hattori taken in view of JP 2001-260609 to Yamamoto et al. and Taguchi et al. (US 2002/0134480).

These references are applied for the same reasons as set forth in the last office action.

3. The declaration under 37 CFR 1.132 filed 1/19/2010 is insufficient to overcome the rejection of claims 1, 2, and 4 based upon 35 USC 103 as set forth in the last Office action because: the results presented do not make any comparisons to the closest prior art (e.g. see MPEP 716.02(e)) and in fact all the presented results relate to examples within the scope of the claims. In lacking any comparisons with the prior art, it is difficult to conclude that the results present any evidence of unexpected results and applicant has not convincingly explained or established in what way the results presented provide evidence of unexpected results. Further, it is noted that these results vary a parameter (sulfur content of inner liner) that is not a feature of the present claims. In the remarks accompanying the declaration, it is stated that the results are unexpected over the applied prior art but these are only attorney arguments that are unsupported by sufficient evidence to support these statements, it being again stressed that applicant has not met their burden of establishing or explaining how the proffered data (which only provide two examples that are both apparently within the scope of the present claims) provide evidence of unexpected results (e.g. see MPEP 716.02(b)).

4. Applicant's arguments filed 1/19/2010 have been fully considered but they are not persuasive.

Applicant's arguments stress that the invention exhibits unexpectedly superior results in view of the 1.1.32 declaration of Mr. Kanou. As noted above, however, this declaration makes no comparisons with the closest prior art (or any prior art or non-inventive examples) and therefore presents insufficient evidence to support any conclusion with respect to unexpected results of the invention over the closest prior art.

It is also argued that JP '609 and Taguchi do not teach providing the rubber layer between the carcass and liner as two layers. While this is not disputed, the teaching for using two layers between the liner and carcass is provided by the primary reference JP '209. As to the secondary references, they are also directed to tires having an intermediate layer between a carcass and liner and in particular provide evidence of the knowledge of the ordinary artisan with respect to the importance of appropriately controlling the amount of sulfur in such intermediate layers, it being submitted that these teachings would have been seen by the ordinary artisan as applicable and relevant to selections of sulfur content for the intermediate layer of the primary references. In particular, it is again submitted that JP '609 would suggest to the artisan the desirability of providing a gradation in sulfur contents from the carcass ply inward in order to in part minimize the "shift" or migration tendency of sulfur from the carcass towards the adjacent layers. Taguchi likewise is directed to a tire having an innerliner as well as a layer intermediate the carcass and the innerliner and stresses the importance of appropriately controlling the amount of sulfur in the intermediate layer. In particular,

Taguchi evidences an understanding that the carcass rubber typically has a high sulfur content (e.g. paragraph [0004]) and that the innerliner typically has a relatively low amount of sulfur (0.1-2 phr - paragraphs [0027] and [0036]) and that the adjacent/intermediate layer (analogous to layer "A" in the claim) should have a controlled amount of sulfur that is not so high that it excessively migrates to the liner and raises its modulus and not so low that the bonding is insufficient, amounts generally within the claimed range being shown to be suitable and effective (e.g. paragraphs [0027]-[0031], Table 2). Again, therefore, given that the inner liner typically has a low sulfur content of 0.1-2 phr and the carcass typically has a high sulfur content, and that the layers should have a gradation in sulfur contents, providing the first intermediate layer adjacent the inner liner to have a sulfur content greater than that of the inner liner and within the claimed 2-2.5 range would have been expected to provide suitable and effective results as it would provide a gradation from the amount of sulfur within the liner while also being consistent with the preferred 2-2.6 range suggested by JP '609 for a layer located adjacent the inner liner. It thus is still submitted that providing the ply adjacent the innerliner with controlled amounts of sulfur consistent with the claimed requirements would have been obvious and provide only the expected and predictable results.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/  
Primary Examiner, Art Unit 1791

G. Knable  
April 3, 2010